

GAO Highlights

Highlights of [GAO-14-865T](#), a testimony before the Cybersecurity, Infrastructure Protection, and Security Technologies Subcommittee of the Homeland Security Committee and the Research and Technology Subcommittee of the Science, Space, and Technology Committee, House of Representatives.

Why GAO Did This Study

Conducting R&D on technologies for detecting, preventing, and mitigating terrorist threats is vital to enhancing the security of the nation. Since its creation, DHS has spent billions of dollars researching and developing technologies used to support its missions. Within DHS, S&T conducts and is responsible for coordinating R&D across the department. Other components also conduct R&D to support their respective missions.

This statement discusses (1) how much DHS invests in R&D and the extent to which DHS has policies and guidance for defining and overseeing its R&D efforts across the department, (2) the extent to which R&D is coordinated across DHS, and (3) the results of DHS border and maritime security R&D efforts and the extent to which DHS has obtained and evaluated feedback on these efforts. This statement is based on GAO's previously issued work from September 2012 to July 2014, and selected updates conducted in September 2014 on the status of GAO's prior recommendations. To conduct the updates, GAO reviewed agency documentation.

What GAO Recommends

In its prior reports, GAO recommended, among other things, that DHS develop policies and guidance for defining, overseeing, coordinating, and tracking R&D activities across the department, and that S&T establish time frames and milestones for collecting and evaluating feedback from its customers. DHS concurred with GAO's recommendations and has actions underway to address them.

View [GAO-14-865T](#). For more information, contact Dave Maurer at (202) 512-9627 or maurerd@gao.gov.

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DEPARTMENT OF HOMELAND SECURITY

Actions Needed to Strengthen Management of Research and Development

What GAO Found

In September 2012, GAO reported that the Department of Homeland Security (DHS) did not know the total amount its components had invested in research and development (R&D) and did not have policies and guidance for defining R&D and overseeing R&D resources across the department. According to DHS, its Science and Technology Directorate (S&T), Domestic Nuclear Detection Office (DNDO), and Coast Guard were the only components that conducted R&D, and GAO found that these were the only components that reported budget authority, obligations, or outlays for R&D activities to the Office of Management and Budget. However, GAO identified an additional \$255 million in R&D obligations made by other DHS components. At the time of GAO's review, DHS did not have a department-wide policy defining R&D or guidance directing components how to report all R&D activities. GAO recommended that DHS develop policies and guidance to assist components in better understanding how to report R&D activities and better position DHS to determine R&D investments. DHS concurred with the recommendation and, as of September 2014, had updated its guidance to include a definition of R&D but efforts to develop a process for coordinating R&D with other offices remain ongoing and have not yet been completed. GAO will continue to monitor DHS's efforts to develop its approach for overseeing R&D at the department.

GAO also reported in September 2012 that S&T had taken some steps to coordinate R&D efforts across DHS, but the department's R&D efforts were fragmented and overlapping, a fact that increased the risk of unnecessary duplication. GAO recommended that DHS develop a policy defining roles and responsibilities for coordinating R&D and establish a mechanism to track all R&D projects to help DHS mitigate existing fragmentation and overlap and reduce the risk of unnecessary duplication. DHS concurred with the recommendation. As of September 2014, S&T has not fully implemented new policy guidance but, according to S&T, is conducting portfolio reviews across the department, as directed by the fiscal year 2013 appropriations act, aimed at coordinating R&D activities. GAO will continue to monitor DHS's efforts to develop a policy to better coordinate and track R&D activities at the department.

In September 2013, GAO reported that DHS border and maritime R&D components reported producing 97 R&D deliverables from fiscal years 2010 through 2012 at an estimated cost of \$177 million. GAO found that the type of border and maritime R&D deliverables produced by S&T, the Coast Guard, and DNDO varied, and R&D customers GAO met with had mixed views on the impact of the deliverables. These deliverables included knowledge products and reports, technology prototypes, and software. For example, S&T developed prototype radar and video systems for use by Border Patrol. However, GAO reported that S&T had not established time frames and milestones for collecting and evaluating feedback on the extent to which deliverables met customers' needs. GAO recommended that S&T establish time frames and milestones for collecting and evaluating such feedback from its customers to better determine the usefulness and impact of its R&D projects and make better-informed decisions regarding future work. As of September 2014, DHS had taken steps to address this recommendation, including making plans to gather customer feedback on a more consistent basis. GAO will continue to monitor DHS's efforts in this area.